

Title (en)

SILICON SENSING STRUCTURE TO DETECT THROUGH-PLANE MOTION A PLANE OF MATERIAL WITH THERMAL EXPANSION SUBSTANTIALLY DIFFERENT FROM THAT OF SILICON

Title (de)

SILIZIUM-ERFASSUNGSSTRUKTUR ZUM DETEKTIEREN EINER EBENENDURCHGÄNGIGEN BEWEGUNG EINER MATERIALEBENE MIT WESENTLICH VON DER VON SILIZIUM VERSCHIEDENEN WÄRMEAUSDEHNUNG

Title (fr)

STRUCTURE DE DETECTION EN SILICIUM POUR DETECTER UN DEPLACEMENT A TRAVERS UN PLAN DANS UN PLAN DE MATERIAU PRESENTANT UNE DILATATION THERMIQUE SENSIBLEMENT DIFFERENTE DE CELLE DU SILICIUM

Publication

EP 2201346 B1 20130821 (EN)

Application

EP 08833442 A 20080929

Priority

- US 2008078179 W 20080929
- US 97620607 P 20070928

Abstract (en)

[origin: WO2009043040A1] A pressure transducer is provided that has a transducer body with a rim, a diaphragm that deflects in response to pressure and a sensor bonded to the diaphragm at the rim and at a center of the diaphragm The sensor detects deflection of the metal diaphragm The sensor and diaphragm are made of different materials A thermal expansion difference between the sensor and the diaphragm is accommodated by flexures in the sensor that accept relative motion in a radial direction of the metal diaphragm with little effect on a sensitivity of the silicon structure to motion in an axial direction of the diaphragm

IPC 8 full level

G01L 9/00 (2006.01); **G01L 9/02** (2006.01); **G01L 19/04** (2006.01)

CPC (source: EP US)

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Citation (examination)

- US 7000478 B1 20060221 - ZWOLLO CRIS RUIZ [NL], et al
- US 2006157133 A1 20060720 - KURTZ ANTHONY D [US], et al
- US 2004134283 A1 20040715 - LEWIS BRIAN D [US]
- US 2004040382 A1 20040304 - PETERSON THOMAS [US], et al

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